



RULEMAKING ISSUE

(Notation Vote)

June 17, 2022

SECY-22-0059

FOR: The Commissioners

FROM: Daniel H. Dorman
Executive Director for Operations

SUBJECT: RULEMAKING ON INDUSTRIAL RADIOGRAPHIC OPERATIONS AND TRAINING (PRM-34-6; NRC-2017-0022)

PURPOSE:

The purpose of this paper is to provide the Commission with an assessment of the post-promulgation public comments received on a notice of interpretation and corresponding change in Agreement State Compatibility Category published on June 1, 2021 (86 FR 29173), regarding Section 34.41(a) of Title 10 of the *Code of Federal Regulations* (10 CFR). The staff has determined all of the comments received to be significant with respect to the post-promulgation comment period afforded under 10 CFR 2.804, "Notice of proposed rulemaking." However, because no new information was provided to change the safety basis for the staff's original recommendation, the staff is not recommending any changes to the interpretation or Agreement State Compatibility Category. Therefore, this paper requests Commission approval to publish responses to the public comments in a *Federal Register* notice. The notice would also discontinue a planned rulemaking activity and deny an associated petition for rulemaking (PRM-34-6). This paper does not address any new commitments or resource implication.

BACKGROUND:

On May 28, 1997 (62 FR 28948), the U.S. Nuclear Regulatory Commission (NRC) issued the final rule, "Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations," commonly called the "two-person rule," which requires a second

CONTACT: Gregory R. Trussell, NMSS/REFS
301-415-6244

qualified individual (radiographer or radiographer's assistant) to be present during industrial radiography operations at temporary jobsites. In the preamble for the two-person rule, the NRC stated, "the purpose of the second individual is to provide immediate assistance when required and to prevent unauthorized entry into the restricted area" (62 FR 28955). The second individual should have "... sufficient radiography and safety training to allow him/her to take charge and secure the radioactive material, provide aid where necessary, and prevent access to radiation areas by unauthorized persons" (62 FR 28955).

In SRM-SECY-20-0068, "Staff Requirements—SECY-20-0068—Reinterpretation, Agreement State Compatibility Category Change, Discontinuance of a Rulemaking and Denial of Petition for Rulemaking on Industrial Radiographic Operations", dated May 24, 2021, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21144A084), the Commission approved the staff's recommendation to publish a new interpretation of the responsibilities of the second qualified individual involved in radiographic operations at temporary radiographic jobsites, as defined in 10 CFR 34.41(a), and to change the Agreement State Compatibility Category for 10 CFR 34.41(a) from B to C. The Commission disapproved the staff's recommendation to discontinue the planned rulemaking and to deny the associated petition for rulemaking. The Commission directed the staff to take final action on these items after it considered public comments and finalized the new interpretation. Further, the Commission directed that if the NRC received significant public comments, the staff should prepare a draft *Federal Register* notice for Commission approval to respond to the comments, consistent with 10 CFR 2.804(f).

DISCUSSION:

Consistent with the Commission's direction in SRM-SECY-20-0068, the NRC issued in the *Federal Register* a notice of a new interpretation of the two-person rule that responded to requests brought to the NRC in a petition for rulemaking from the Organization of Agreement States (86 FR 29173; June 1, 2021). The new interpretation was immediately effective upon issuance. The new interpretation did not change the requirement that two qualified individuals be present to prevent unauthorized entry into the restricted area.

The NRC had previously interpreted 10 CFR 34.41(a) to require both the radiographer and the second qualified individual to maintain direct observation when radiographic operations are being conducted at a temporary jobsite. However, the regulation uses the term "observe" rather than "directly observe," and also requires that the second qualified individual "be capable of providing immediate assistance to prevent unauthorized entry." The NRC's interpretation had been that direct observation was required to ensure the second individual could provide immediate assistance. As approved by the Commission, the NRC has reinterpreted that requirement, in light of operating experience demonstrating direct visual observation to be unnecessary to protect public health and safety.

The two-person rule is intended to ensure that the second individual is able to take charge and secure the radioactive material, provide aid where necessary, and prevent access to radiation areas by unauthorized persons. To achieve that purpose, the word "observe" is used to ensure that the second individual can determine when it is necessary to take charge or help the radiographer and prevent unauthorized entry. Therefore, the NRC now interprets 10 CFR 34.41(a) such that the requirements contained in the sentence, "The additional qualified individual shall observe the operations and be capable of providing immediate assistance to prevent unauthorized entry," are met if the second qualified individual is in sufficiently close proximity to the operation and sufficiently aware of the ongoing activities to be able to provide

assistance or take charge when necessary and to prevent unauthorized entry. The second individual may perform other tasks nearby as long as the individual is cognizant of the site-specific circumstances when radiographic operations are in progress.

Although the new interpretation affords additional flexibilities to the second individual under some circumstances, it is an interpretation of a stand-alone requirement, and it does not affect other requirements and guidance. Thus, the scope of the new interpretation is narrow and focused on the functions to be performed by the second qualified individual required to be present at all temporary jobsites.

The NRC held a public meeting on August 26, 2021 (ADAMS Accession No. ML21214A256), during which the staff provided an overview of the new interpretation and background information on the “two-person” requirement and its impact on NRC regulations. The staff took questions from participants and clarified the NRC’s reinterpretation of the requirements. Participants questioned the necessity and feasibility of the interpretation and requested more realistic examples of situations when a licensee could implement the new interpretation. The meeting summary can be found at ADAMS Accession No. ML21245A423.

Comments and Responses

In response to the notice requesting comment on the new interpretation, the NRC received four submittals from: a private citizen, the Organization of Agreement States, the State of Oklahoma, and the State of Arkansas (ADAMS Accession Nos. ML21155A124, ML21182A320, ML21172A130, and ML21182A362). To summarize, the comments stated that the interpretation does not improve clarity or help radiation safety and that direct observation is necessary. Comments also stated that the example given in the *Federal Register* notice of video observation is rare, the use of radio is more likely, and the words “sufficient” and “sufficiently” are ambiguous and requested additional clarification on the interpretation. In addition, comments asserted the compatibility change might cause consistency problems for the Agreement States.

The NRC staff agrees with some of the comments received and included clarifications to address these points in the *Federal Register* notice. The staff plans to revise existing guidance to provide additional clarifications. The NRC staff disagrees with the comment that direct observation is necessary by the second individual. The objective of the two-person rule is that the second individual be available to provide immediate assistance, which may not necessitate direct observation. What is necessary for sufficient awareness will vary based on the conditions at the site and what tools are available to the radiographer and the second individual. For example, it may be acceptable for the second individual to have less awareness of the operations or to be located further away if the radiographer is able to observe all points of entry and alert the second qualified individual of a potential unauthorized entry. However, if the second individual is not able to maintain sufficient awareness and proximity to the radiographic operation to perform these functions without direct observation, then the new interpretation does not afford additional flexibility. In this way, the objective of the requirement is maintained under a performance-based, flexible approach.

Based on comments received, the NRC staff determined that additional guidance would be helpful to implement the new interpretation. While some additional discussion is provided in the enclosed *Federal Register* notice, the staff intends to revise existing guidance to incorporate the new interpretation in more detail, as described below. While these revisions are in development, licensees can continue to implement the existing guidance, which remains acceptable, although now overly restrictive in some cases, to meet regulatory requirements under the new

interpretation. Existing guidance will be revised to provide examples of compliance for the new interpretation within one year from the Commission's final approval.

The NRC changed the Agreement State Compatibility Category for 10 CFR 34.41(a) from B to C specifically to ensure Agreement States have the flexibility to adopt more stringent requirements (e.g., to maintain their current interpretation of the two-person rule). The NRC staff recognize that licensees operating under different regulations in different jurisdictions may create a potential for licensees to use the new interpretation in an Agreement State that does not choose to implement it. Further, other requirements in 10 CFR Part 34 that apply to radiography at temporary jobsites are designated as Compatibility Category C, such as the survey requirement in § 34.49(b), and have not resulted in cross-jurisdictional boundary issues¹. Licensees are responsible for knowing the regulatory requirements in the jurisdiction where they are conducting licensed activities. Despite these differences, the NRC staff is not aware of any cross-jurisdictional boundary issues for the National Materials Program. In addition, with the benefit of over 20 years of experience with Agreement States implementing the two-person rule differently, the staff has determined that essentially identical implementation is not necessary to provide an orderly pattern of regulation.

Agreement State Interaction

The NRC staff met with the Agreement States several times. Most recently, the staff met with Agreement States on April 6, 2022, to discuss the staff's proposed responses to the comments on the June 1, 2021, notice of interpretation and at the subsequent OAS/CRCPD Commission meeting. At the April meeting, the staff informed the Agreement States of the staff's intention to recommend that the Commission maintain the published interpretation. The staff emphasized that this interpretation is only applicable in very limited circumstances. The staff acknowledged the need for enhanced communication between the NRC and the Agreement States in the rulemaking process given our co-regulator relationship. The meeting was attended by approximately 80 people of which the majority were from the Agreement States.

During the discussion portion of the meeting, a few of the Agreement State representatives expressed general opposition to the notice of interpretation. Most who spoke or who provided comments in the chat requested additional clarification of the interpretation and others requested the NRC to provide specific ways or methodology for this new interpretation to be implemented. In general, the comments made at the meeting were consistent with the written comments addressed in the *Federal Register* notice, opposing the interpretation. One commenter asserted there could be an unfair economic advantage to licensees who choose to take advantage of the new interpretation (implying an incentive for licensees to violate the requirements). Another commenter suggested that the NRC consider requiring preapproval before a licensee could use the interpretation.² In addition, some Agreement States provided suggestions for implementation of this interpretation which will be considered in guidance development. While there were comments to the contrary, the meeting did not raise any new information that would change the staff's recommendations on the interpretation.

¹ Different jurisdictions have been implementing different versions of the two-person rule since at least 2000

² For the NRC to adopt this approach would likely require rulemaking, which the staff does not believe to be warranted. However, the change in Compatibility Category for 10 CFR 34.41(a) may allow Agreement States to require additional approvals before affording the second individual the flexibility in the NRC's interpretation.

In an email dated May 17, 2022, the OAS Chair verified that this section reflects the overall sentiments of the Agreement States.

Revisions to Existing Guidance

The staff recognizes that, currently, the interpretation would be applicable only in limited circumstances, and additional guidance to address those limited circumstances specifically is warranted. The NRC staff intend to develop an addendum to the current version of NUREG1556, Volume 2, Revision 1, “Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Industrial Radiography Licenses” and to revise Inspection Procedure 87121, “Industrial Radiography Programs,” dated December 17, 2014, to address the new interpretation of the surveillance requirements. The addendum and revision will provide clarifications to address (1) the limited circumstances where this new interpretation would be applicable (e.g., where the radiographer has a clear view of the entire operation); (2) the effect of the interpretation on other requirements, such as the security requirements in 10 CFR Part 37, “Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material”; (3) the focus of the interpretation on the performance requirements for the second individual to maintain sufficient awareness to provide immediate assistance and to prevent unauthorized entry; and (4) the ability of future technology to provide additional tools for meeting the performance-based requirement.

Discontinuation of Planned Rulemaking and Denial of Petition

The NRC did not receive any new information through comments and meetings that would cause the staff to recommend a change in approach on the new interpretation or the compatibility category. Additionally, none of the comments received on the notice of interpretation discussed the request for training requirements raised in the petition. In SECY-20-0068, “Reinterpretation, Agreement State Compatibility Category Change, Discontinuance of a Rulemaking and Denial of Petition for Rulemaking on Industrial Radiographic Operations (PRM-34-6; NRC-2017-0022)” (ADAMS Accession No. ML20093D804), the staff recommended that PRM-34-6 could be denied without rulemaking based on the new interpretation and operating experience indicating that the requested additional training requirements were not necessary. Based on the analysis in SECY-20-0068 and the lack of comments warranting a change to the new interpretation, the staff recommends that the Commission approve discontinuation of the planned rulemaking activity and the denial of PRM-34-6, in accordance with 10 CFR 2.803(i)(2).

AGREEMENT STATE CONSIDERATIONS:

The staff’s response to comments from OAS and individual Agreement States is described above. In addition, the change in compatibility and the interpretation of 10 CFR 34.41(a) will allow the staff to end its practice of holding in abeyance compatibility findings for these inconsistencies during the Integrated Materials Performance Evaluation Program reviews.³ This approach allows Agreement States the flexibility to align their programs with the staff’s proposed interpretation, continue their current interpretation of requiring two individuals to observe the restricted area, or adopt another more restrictive approach.

³Letter from Paul H. Lohaus, NRC, to all Agreement States, Minnesota, and Pennsylvania, “Results of the Management Review Board’s Consideration on the Working Group’s Report on the Re-evaluation of 10 CFR 34.41(a) Commonly Known as the ‘Two-Person Rule’ (STP-05-025),” dated March 25, 2005 (ADAMS Accession No. ML050870344).

RECOMMENDATIONS AND COMMITMENTS:

The staff recommends that the Commission take the following three actions:

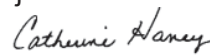
- (1) Approve discontinuation of the planned rulemaking to revise 10 CFR Part 34, "Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations."
- (2) Approve publication of the enclosed *Federal Register* notice responding to public comments on the new interpretation of 10 CFR 34.41(a) and the corresponding compatibility change, announcing a discontinuation of planned rulemaking, and denying PRM-34-6.
- (3) Deny PRM-34-6 and inform the petitioner of this decision.

If the Commission approves the recommendations, the staff will do the following:

- (1) Inform the appropriate congressional committees of these actions.
- (2) Publish the enclosed *Federal Register* notice responding to public comments on the recent interpretation of NRC requirements at 10 CFR 34.41(a) and compatibility category change, announcing a discontinuation of planned rulemaking, and denying PRM-34-6.
- (3) Develop an addendum to the current version of NUREG-1556, Volume 2, and revise Inspection Procedure 87121.

COORDINATION:

The Office of the General Counsel has no legal objection to this action.



Haney, Cathy signing on behalf
of Dorman, Dan
on 06/17/22

Daniel H. Dorman
Executive Director
for Operations

Enclosures:

1. *Federal Register* notice
2. Letter to the Petitioner

SUBJECT: RULEMAKING ON INDUSTRIAL RADIOGRAPHIC OPERATIONS AND TRAINING (PRM-34-6; NRC-2017-0022) DATED June 17, 2022

ADAMS Accession Nos.: ML21343A434 (SECY Paper) ML21343A433 (Pkg.)

OFFICE	NMSS/REFS/MRPB	NMSS/REFS/MRPB	NMSS/REFS/RASB	NMSS/MSST/MSTB	NMSS/REFS/MRPB
NAME	GTrussell	LRonewicz	CBladey	MArribas-Colon	JShepherd
DATE	12/09/2021	12/09/2021	12/23/2021	12/14/2021	12/21/2021
OFFICE	NMSS/MSST	NMSS/REFS	OCFO	Region I	Region III
NAME	KWilliams	JTappert	RAllwein	DLew	JGiessner (MShuaibi)
DATE	12/30/2021	01/04/2022	01/03/2022	12/27/2021	01/05/2022
OFFICE	Region IV	QTE Resource	OGC-NLO	NMSS	EDO
NAME	SMorris	JDougherty	SClark	JLubinski	DDorman CHaney for
DATE	01/05/2022	01/07/2022	02/04/2022	05/24/2022	06/17/2022

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